

REMARKS

I. Office Action Summary

Claims 1-23 are pending. In the final Office Action mailed June 21, 2004, the Examiner rejected claims 1, 2, 4-8, 13, 15-16 and 19-22 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,930,707 ("Vambaris") in view of U.S. Patent No. 6,266,514 ("O'Donnell") and U.S. Patent No. 6,295,460 ("Nagel"). The Examiner rejected claim 3 under 35 U.S.C. 103(a) as being unpatentable over Vambaris, O'Donnell and Nagel in further view of U.S. Patent No. 5,875,398 ("Snapp"), and the Examiner rejected claims 9-12, 14, 17-18 and 23 under 35 U.S.C. 103(a) as being unpatentable over Vambaris, O'Donnell and Nagel in further view of Agilent Technologies Wireless Network Installation & Operations Brochure. Applicant traverses these rejections for the following reasons.

II. There is No Motivation to Combine the References Cited by the Examiner

The Examiner rejected independent claims 1, 2, 15 and 16 based, at least in part, on the combination of Vambaris, O'Donnell and Nagel. While Applicant thanks the Examiner for his consideration and response to Applicant's previous remarks, Applicant respectfully submits that, contrary to the Examiner's discussion in his response, there is no motivation to combine Vambaris with O'Donnell and Nagel in order to make the suggested modifications. Further, any such modification would not only render Vambaris inoperable for its intended purpose but would change its principle of operation. Therefore, Applicant respectfully asserts that the Examiner has still failed to make a prima facie case of obviousness with respect to these independent claims and they, along with their dependent claims, are allowable.

Vambaris is directed toward a system for remotely testing a base transceiver station. As described in Vambaris, "a lightly loaded remote BTS may appear quiescent to a central monitoring position either because of an absence of traffic or because of a fault at a station. There is thus a need to be able to initiate a test when a BTS appears inactive to determine whether the BTS is faulty or not." Col. 1, lines 12-18. As described in Vambaris itself, Vambaris is concerned only with determining whether a BTS is operational and reporting any inoperability – and not with mapping quality of service throughout its coverage area.

Applicant's independent claim 1 includes the element of "operating a second mobile station function to communicate the diagnostic data and location data to a remote entity via a communication path comprising an air interface." The other independent claims include similar elements. Since Vambaris does not teach or suggest this element, the Examiner suggests replacing Vambaris' wired link 54 with Nagel's wireless link in order to find this element and to provide the user with the ability to roam freely during communications.

Making this modification, however, would render Vambaris inoperable for its intended purpose. The wired link 54 in Vambaris is used to report errors to a central control station when the error rate exceeds a predetermined threshold (e.g., when the BTS is inoperable). If the wired link in Vambaris were replaced with a wireless link, then the test unit would not be able to report errors to the central control station when the BTS is inoperable, because the test system would not be able to wirelessly communicate with the BTS. This modification would therefore render Vambaris inoperable for its intended purpose. As MPEP § 2143.01 describes, "if [the] proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification."

In his response, the Examiner suggests that "many alternate communication means are still available if the BTS-under-test is inoperable" such as a second BTS or various short-range communication systems. The wired link 54 in Vambaris assures that the test system can report errors if the BTS is not operable. With the Examiner's proposed modification, the test system would only be able to report errors if one of these alternate communications means were indeed available, and if the test system included the ability to communicate over one of these alternate means. Therefore not only would this modification make the system less reliable, it would increase the cost and complexity of the test system by requiring that it include additional equipment for communicating via a Bluetooth, RF or some other interface. Thus, contrary to the Examiner's assertion, there is no motivation to make this modification.

Additionally, adding the functionality of O'Donnell, in the manner suggested by the Examiner, would change Vambaris' principle of operation. O'Donnell is directed toward automatically mapping areas of poor coverage in a cellular network. "The system constructs a visual map" using mobile station location information, and the map can then be used to identify the areas of poor coverage. (Abstract). While Vambaris seeks to determine whether the BTS is inoperable or just inactive, O'Donnell assumes the BTS is operable and seeks to identify areas of poor coverage. The functionality described in O'Donnell is not needed to determine if a BTS is operational, and it would not aid Vambaris' system in making this determination.

In fact this new functionality would change the Vambaris' principle of operation by changing it from a system for determining the operability of a BTS into a system for determining areas of poor coverage. Additionally, Vambaris describes a fixed system that can be remotely triggered to test the operability of a BTS. Adding mobility would only increase the complexity of the system, and after the modification it would require an operator to move the system around.

Thus, this modification would change Vambaris from a fully automatic system to one that requires manual operation. Therefore, there is no motivation to combine these references as asserted by the Examiner.

In his response, the Examiner asserts that "the test system can be a wireless system to test the BTS and need not be wired - this provide roaming and a motivation for the tester to be anywhere within the cell to perform the testing." As described, Applicant submits that there is no motivation to make this change, because mobility is simply not needed to achieve the purpose of Vambaris - determining if the BTS is operational. Applicant also respectfully points out that "the mere fact that the reference can be combined or modified does not render the resultant combination obvious unless the prior art suggest the desirability of the modification," and in this case the references do not suggest the desirability of this combination. MPEP § 2143.01.

For the foregoing reasons, Applicant respectfully submits that there is no motivation to combine Vambaris with O'Donnell and Nagel in the manner suggested by the Examiner, and therefore the Examiner has failed to make a prima facie case of obviousness. Accordingly, independent claims 1, 2 and 15-16 are allowable along with dependent claims 3-14 and 17-23. If any questions or issues remain, the Examiner is invited to contact Applicant's attorney, Brian Harris, at his direct dial number of (312) 913-3303.

Respectfully submitted,

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